Amendments to the Drawings:

The attached sheet of Fig. 3 includes a change to Fig. 3. The change involves identifying the amino acid sequence in Fig. 3 by SEQ ID NO:1. This sheet replaces the original sheet of Fig. 3.

REMARKS/ARGUMENTS

The Office Action has rejected claims 6 and 8 – 12. Claims 6 – 10 are rejected under 35 U.S.C. § 112 and claims 6 and 11 – 12 are rejected under 35 U.S.C. § 102/103. In light of the amendments above, the arguments below and the enclosed Declaration, Applicants respectfully request reconsideration.

§ 112 Rejections

Claims 6 – 10 are rejected under 35 U.S.C. § 112 as being indefinite. Applicants have amended claim 6 to specify the CMV glycoprotein O.

In a separate rejection, the Office Action has rejected claims 6 and 8 – 12 as failing to comply with the enablement requirement. Applicants believe that their amendment to CMV glycoprotein O addresses this rejection. Applicants have now clarified that independent claims 6 and 11 are now drawn to the CMV glycoprotein O polypeptide.

Sequence Requirements

In the Notice to Comply with sequence listing rules attached to the Office Action, Applicants were required to file a paper copy and a computer readable form of the sequence listing as well as a statement under 37 CFR 1.821 (f) and (g). Applicants note here that the above items were already filed with the U.S. Patent and Trademark Office (USPTO) on September 4, 2003 and they were received by the USPTO on September 8, 2003. A copy of the above filing is enclosed.

Applicants were further required to insert SEQ ID NO into Fig. 3. In this regard, Applicants enclose a replacement sheet for Fig. 3 in which the amino acid sequence is identified by SEQ ID NO:1.

Specification

The Office Action asks for an explanation description of the "transmembrane anchor region" cited in claim 8. Applicants note page 9 of the specification, beginning at line 24, where the transmembrane anchor region is described. Applicants note that a soluble form of gO would likely consist of amino acids 31 – 466. Therefore, the membrane spanning domain is defined as excluding these residues.

§ 112 Rejections

Claim 8 was rejected under 35 U.S.C. § 112, second paragraph as being indefinite. Claim 8 recites a limitation to "the" transmembrane anchor region. Applicants believe that they have addressed this rejection in the previous paragraph and note that claim 8 now describes the transmembrane anchor region as "consisting of amino acids 14 – 30."

§ 102 Rejections

The Office Action has rejected claims 6, 11 and 12 under 35 U.S.C. § 102(b) as being anticipated by Gonczol, et al. Applicants first note that they have now clarified that all claims are drawn to CMV glycoprotein O.

Applicants draw the Examiner's attention to the enclosed Declaration where inventor Professor Teresa Compton discusses Gonczol, et al. In paragraph 4, Professor Compton makes the point that Gonczol, et al. describes a completely different glycoprotein complex that is unrelated to gH, gL or gO. Professor Compton also makes the point that CMV is a complex virus and that there are multiple glycoprotein complexes.

§ 103 Rejections

The Examiner has rejected claim 6 as being unpatentable over Li, et al. and claims 6 and 11 – 12 as being unpatentable over Huber, et al. and Gretsch, et al. Applicants disagree with the Examiner's characterization of the references because none of the references would teach one of skill in the art that the gCIII complex comprises glycoprotein O, glycoprotein H and glycoprotein L.

Applicants once again draw the Examiner's attention to Professor Compton's Declaration. In paragraphs 3 – 7, Professor Compton provides a summary of the glycoprotein complex system in HCMV and describes the delineation of the genes encoding HCMV glycoproteins. Professor Compton notes that the prior art understood that multiple glycoprotein complexes were displayed in HCMV. However, the prior art, such as the Examiner's cited references, would not have understood the genetic identity of the complexes. Note that Professor Compton specifically addresses the Gretsch, et al. reference.

In paragraphs 6 and 7, Professor Compton talks specifically about reasons why one of skill in the art would not be able to review previous work on HCMV glycoproteins and assign a particular identity to components of a particular complex. Professor Compton describes ambiguities involving weight of glycoproteins and describes the unusual coding capacity of the HCMV genome. Relating to the first reason, Professor Compton notes that unless one can determine how much of the overall mass of a glycoprotein is derived from the carbohydrate and how much is derived from the polypeptide itself, one would not be able to correlate a particular gene to a particular protein. Referring to the complexity of the HCMV genome, Professor Compton notes that because of the approximately 225,000 nucleotides and

192 unique open reading frames, one would not understand which candidate gene would correspond to which protein.

In paragraph 8, Professor Compton addresses the other two cited references and notes that

> "the identity of the 125 – 145 kDa gene remained undefined and it was widely speculated that it may be oligomor of gH and gL since the sum of their mass was approximately 125 kDa. Li, et al. and Huber, et al. taught that the 125 – 145 kDa protein was neither gH or gL nor a modified form of the two proteins and therefore was likely to be encoded by a distinct gene product . . . . There were at least 35 genes that could potentially encode this protein and thus it was not obvious from this work or any other work what gene encoded the protein that Huber ultimately named gO and mapped to the UL 74 gene by detailed biochemical analysis including protein sequencing (Huber and Compton, J. Virol. 72:81-97, 1998)."

It is this 1998 Journal of Virology paper that is the basis for the above-identified application. Without access to the 1998 Journal of Virology paper, one of skill in the art could not have understood that glycoprotein gO was a part of the gCIII complex and therefore could not have been taught the present invention. The Examiner's cited prior art does not teach all the components of Applicants' claims.

Applicants believe the claims are now in condition for allowance. A Petition and Fee for Three Months Extension of Time is enclosed. No other fees are believed necessary. However if any other fees are necessary, please charge Deposit Account 17-0055.

Respectfully submitted,

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